

Tuesday, April 21, 2015 8:04:22 AM

131654

PRELIMINARY ISSUE

Page 1



Revision ID: PRELIM

Item Name: Display Casing End Cap Assembly

Start Date: 4/21/2015 **Start Qty:** 2.00

Required Date: 4/21/2015 Req'd Qty: 2.00

Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: MCS Date: 15-04-21 Tooling: _____ Date: _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
-----------------	---------------------

D5242

100

100

Mill Conv

Conventional Milling Machine

Memo

Mill as per dwg

0.00

0.03

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

120

QC8- Inspect parts - second check

0.00

120

OC

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/> </div> <div style="width: 33%;"> No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/> </div> <div style="width: 33%;"> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> </div> </div>			FAULT CATEGORY <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/> </div> <div style="width: 33%;"> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Misabeled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> </div> <div style="width: 33%;"> Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/> </div> </div>		
OTHER : <input type="checkbox"/>					

Work Order ID 131654

Tuesday, April 21, 2015 8:04:22 AM

131654**PRELIMINARY ISSUE**

Page 2

Item ID: D5242-041

Accept

N900040100Setup Start ***NS1***

Revision ID: PRELIM

Stop ***NS2***

Item Name: Display Casing End Cap Assembly

Start Date: 4/21/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 4/21/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursTool ID Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Chemical Conversion Coat per QSI005 4.1

0.00

130

Hand Finish

Memo

0.00

Hand Finishing

140

QC7-Inspect Chemical Conversion Coat

0.00

140

QC

Memo

0.00

Quality Control

150

0.00

150

Small Fab

Memo

0.00

Small Fab

insert helicoils as per dwg

2 15-4222/1/2015

(2) 2B 15-04-22

2 FF APR 24 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
<div style="display: flex;"> <div style="flex: 1;"> Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/> </div> <div style="flex: 1;"> No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/> </div> </div>	<div style="display: flex;"> <div style="flex: 1;"> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;"> Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/> </div> </div>	<div style="display: flex;"> <div style="flex: 1;"> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Misabeled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;"> Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/> </div> </div>			
OTHER : <input type="checkbox"/>					

Tuesday, April 21, 2015 8:04:22 AM

131654

PRELIMINARY ISSUE

Page 3

Accept

N900040100

Setup Start *NS1*

Revision ID: PRELIM

Item Name: Display Casing End Cap Assembly

Stop *NS2*

Start Date: 4/21/2015 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 4/21/2015 **Req'd Qty:** 2.00 ***~***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/>	No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Misabeled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/>
OTHER : _____					

Work Order ID 131654

Tuesday, April 21, 2015 8:04:22 AM

131654

PRELIMINARY ISSUE

Page 4

Item ID: D5242-041

Accept

N900040100

Setup Start

NS1

Revision ID: PRELIM

Item Name: Display Casing End Cap Assembly

Stop

NS2

Start Date: 4/21/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 4/21/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: <u>PRELIM</u>	0.00							
190									DAS
Packaging	Memo	0.00							9
Packaging									9-89
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.00							
Quality Control									

[Handwritten signature]

POSITIVE RECALL

EFFECTIVE 15-04-21 AUTH MLJ

RELEASED _____ DATE _____

RD15-1004-02

MLJ APR 29 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
<div style="display: flex;"> <div style="flex: 1;"> Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/> </div> <div style="flex: 1;"> No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/> </div> </div>	<div style="display: flex;"> <div style="flex: 1;"> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;"> Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/> </div> </div>	<div style="display: flex;"> <div style="flex: 1;"> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Misabeled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;"> Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/> </div> </div>			
OTHER : _____					

Tuesday, April 21, 2015 8:04:26 AM

PRELIMINARY ISSUE

Page 1

Work Order ID: 131654

131654

Parent Item: D5242-041

D5242-041

Parent Item Name: Display Casing End Cap Assembly

Start Date: 4/21/2015

Required Date: 4/21/2015**Start Qty: 2.00**

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 15-04-20 JLM VERIFIED:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.375X02.75		Purchased	No				f	0.0000		1			
<p>*M6061T6B0.375X02.750* 3.00 <i>9/11</i></p> <p>6061-T6 Bar .375 x 2.750 <i>3.00 9/11</i></p> <p>MS21209C0615</p> <p>*MS21209C0615* 132123</p> <p>Helicoil, Locking</p>													
		Purchased	No				Each	0.0000		8			
<p><i>M124 443 **</i></p> <p><i>J.C.L. 12/04/21</i></p> <p><i>0.406</i></p> <p><i>8 FF</i></p> <p><i>APR 24 2015</i></p>													

Also Buffalo only

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

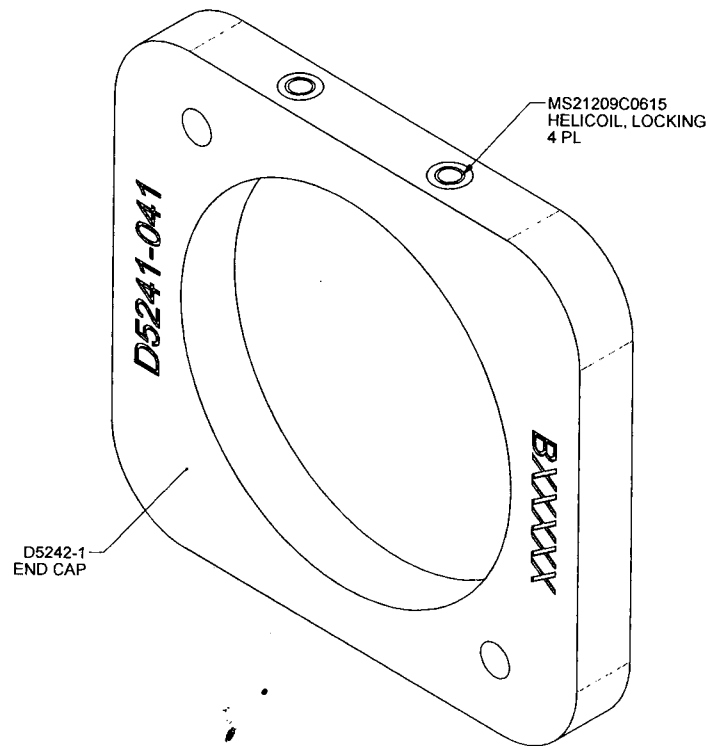
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause <div style="display: flex;"> <div style="flex: 1;"> Environment <input type="checkbox"/> Design <input type="checkbox"/> Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Pre <input type="checkbox"/> Material <input type="checkbox"/> Internal Transport <input type="checkbox"/> Tribal Knowledge <input type="checkbox"/> LOA <input type="checkbox"/> Substation <input type="checkbox"/> Past Expiry Date <input type="checkbox"/> Misidentified <input type="checkbox"/> </div> <div style="flex: 1;"> No Re-verification <input type="checkbox"/> Operator <input type="checkbox"/> Offset/Setup <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Use for Testing <input type="checkbox"/> Poor Information <input type="checkbox"/> Rushing <input type="checkbox"/> Product Improvement <input type="checkbox"/> Process Improvement <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Past Due <input type="checkbox"/> </div> </div>		FAULT CATEGORY <div style="display: flex;"> <div style="flex: 1;"> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;"> Temperature/Cure <input type="checkbox"/> Set-up <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Drill Holes <input type="checkbox"/> </div> <div style="flex: 1;"> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set <input type="checkbox"/> Misabeled <input type="checkbox"/> Fit/Function <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;"> Positioned Wrong <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Misread <input type="checkbox"/> Turning Sequence <input type="checkbox"/> </div> </div>			
		OTHER : <input type="checkbox"/>			



PRELIMINARY ISSUE

ITEM	QTY	P/N	DESCRIPTION
		D5242-041	DISPLAY CASING END CAP ASSY
1	1	D5242-1	END CAP
2	4	MS21209C0615	HELICOIL, LOCKING



D5242-041 DISPLAY CASING END CAP ASSY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO FUNDAMENT
WITHOUT NOTICE
WORK ORDER
NO 1316-S4-MCS
15-04-21

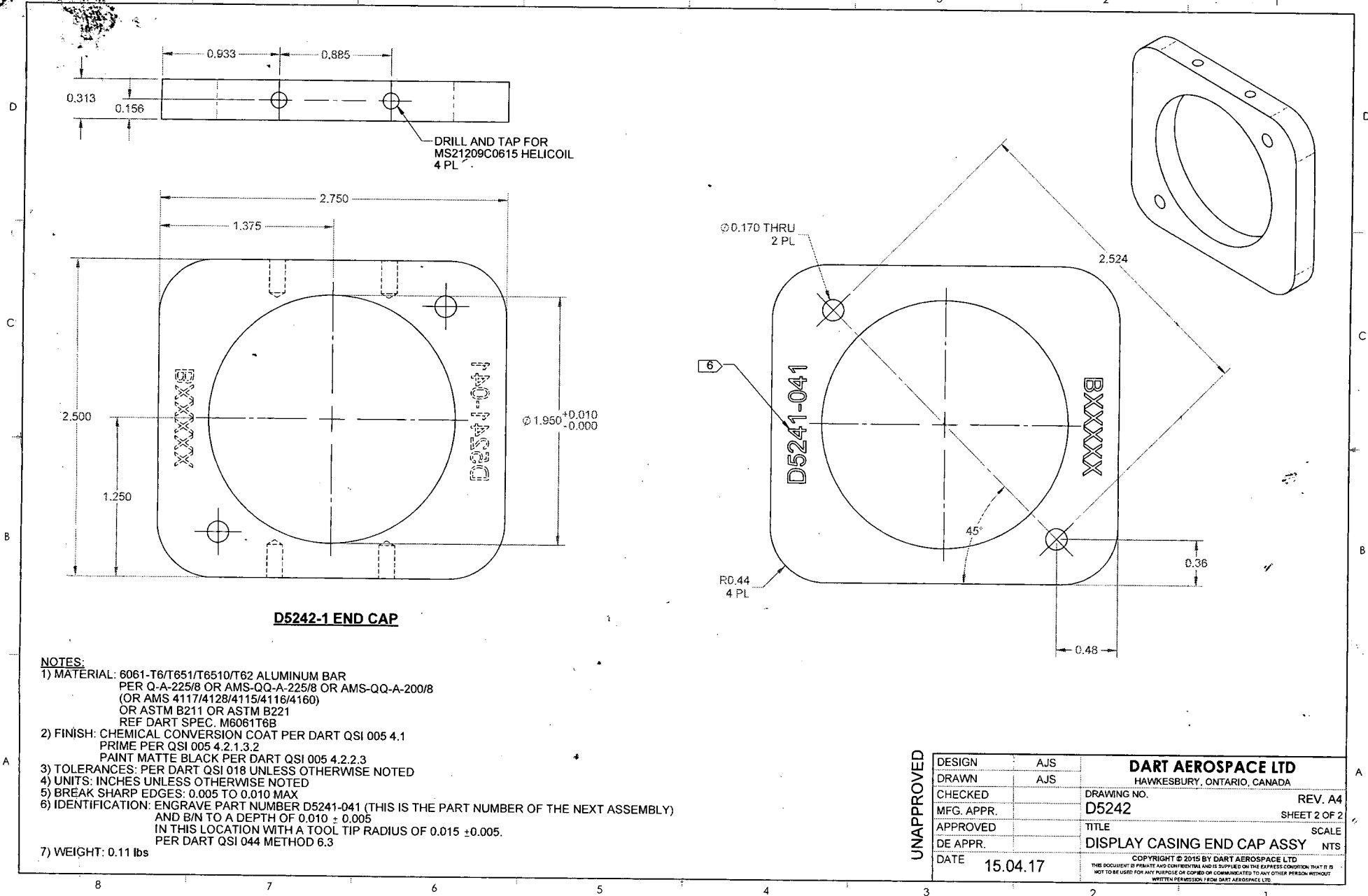
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: SEE -1
- 7) WEIGHT: 0.12 lbs

UNAPPROVED

A	NEW ISSUE	AJS	15.04.17
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A4
MFG. APPR.		D5242	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		DISPLAY CASING END CAP ASSY	NTS
DATE	15.04.17	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

PRELIMINARY ISSUE



B I L L O F L A D I N G

No: PEC 805103

Ship From:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 905-738-9033

Ship Date 28Jan13 at 11:14 From PFW
 Probill
 Via VIM TRANSFER
 FOB CONCORD
 Frt PREPAID
 Route 0- 0 Manifest
 Vhcle Trailer
 Slp STAN IVERS (905-532-1350)
 Sold To: (20115)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Ship To: (1)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7
 Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order PEC-530434- 1 Your PO # 18936

ALUMINUM FLAT BAR 6061-T6511

.250" x 2.50" X 240.0000"

Heat Number
 201300292

Tag No
 144959

Quantity
 20 FT

PCS
 1

Wt LBS
 15

2) Our Order PEC-530434- 2 Your PO # 18936

ALUMINUM FLAT BAR 6061-T6511

.250" x 4.00" X 144.0000"

Heat Number
 18526

Tag No
 144960

Quantity
 12 FT

PCS
 1

Wt LBS
 14

3) Our Order PEC-530434- 3 Your PO # 18936

ALUMINUM FLAT BAR 6061-T6511

.375" x 1.00" X 144.0000"

Heat Number
 Z00243003

Tag No
 144961

Quantity
 12 FT

PCS
 1

Wt LBS
 5

4) Our Order PEC-530434- 4 Your PO # 18936

ALUMINUM FLAT BAR 6061-T6511

.375" x 3.00" X 144.0000"

Heat Number
 12091081A

Tag No
 144962

Quantity
 12 FT

PCS
 1

Wt LBS
 16

5) Our Order PEC-530434- 5 Your PO # 18936

ALUMINUM FLAT BAR 6061-T6511

.50" x 2.50" X 144.0000"

Heat Number
 201222754

Tag No
 144963

Quantity
 12 FT

PCS
 1

Wt LBS
 17

Page: 1Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
 RAPPORTÉES IMMÉDIATEMENT
 ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY
 RETOUR DE MARCHANDISES AVEC NOTRE NUMÉRO D'APPROBATION SEULEMENT.
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

Sp 13-01-30

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.375" x 3.00" X 144.0000"

PART NO.

PO/Rel 18936

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC 805103-004

28Jan13

Signed by:

Pg 1/1

CAN ART

ALUMINUM EXTRUSION INC.

Material Test Report

Manifest: 252270

Ship To: ThyssenKrupp Materials NA
2821 Langstaff Road
Concord, ON L4K 5C6

Ticket:
5280548

Our Order: 388867 - 5

Cust P.O.: 242137

Die: ES05677

Part: 05677-000-144

Alloy Temper: 6061 T6511

Description: .375 x 3.000

Print Date: 10/3/12

Chemical Composition Range

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OtherEach	OtherTotal
6061										
Min	0.40		0.15		0.8	0.04				
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15

Mechanical Properties

Strength ksi

Sample ID	Cast #	Lot #	Test Date	Ultimate Tensile	Yield 2% offset	Elongation 2" gage length
131939	12091081A	A11	10/2/12	46.14	42.37	9.9

Applicable Specifications: ASTM B221-08 QQA200/8

Country of Origin: 85 Parkshore Drive, Brampton, Ontario CANADA L6T 5M1

DAS
14
8-08

13/01/30

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Ray Hussain - Tensile Testing

Authorized:


Evan Eng, Quality Assurance Mgr.